

(12) UK Patent Application (19) GB (11) 2 140 068 A

(43) Application published 21 Nov 1984

(21) Application No 8314080

(22) Date of filing 20 May 1983

(71) Applicant
Draftex Industries Limited (United Kingdom),
3 Glenfinlas Street, Edinburgh EH3 6YY

(72) Inventor
Werner Kruschwitz

(74) Agent and/or Address for Service
Mathisen Macara & Co,
Lyon House, Lyon Road, Harrow, Middx HA1 2ET

(51) INT CL³
E06B 3/62

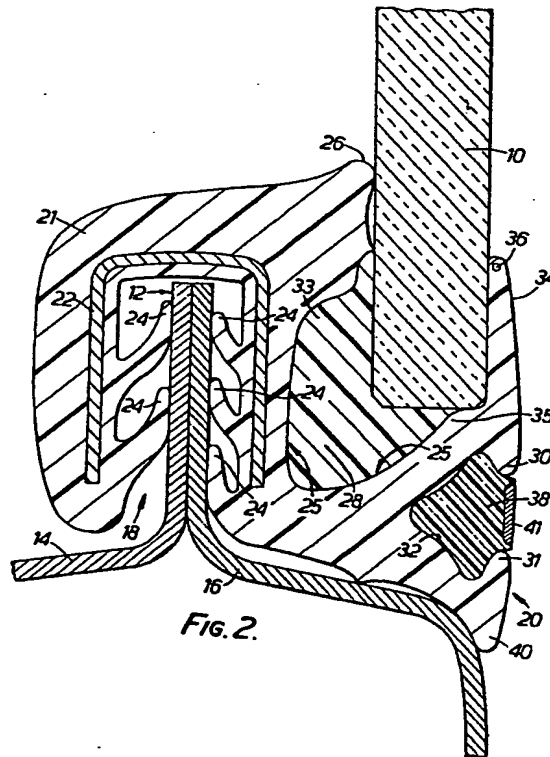
(52) Domestic classification
E1R 27A3

(56) Documents cited
GB A 2046338 GB 0754311 EP A 0079839
GB 1239935 EP A 0073350

(58) Field of search
E1R

(54) Window glass mounting

(57) A windscreen mounting 18 for mounting on a flanged joint 12 running around the window opening, defines a ledge-shaped surface 25 having a recess 28 for receiving mastic 33. The mounting is delivered to the vehicle manufacturer with the mastic 33 in position and covered by a thin flap 34. A stiffening member 38 is placed in the slot 32.



The drawing(s) originally filed was/were informal and the print here reproduced is taken from a later filed formal copy.
The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1982.

GB 2 140 068 A

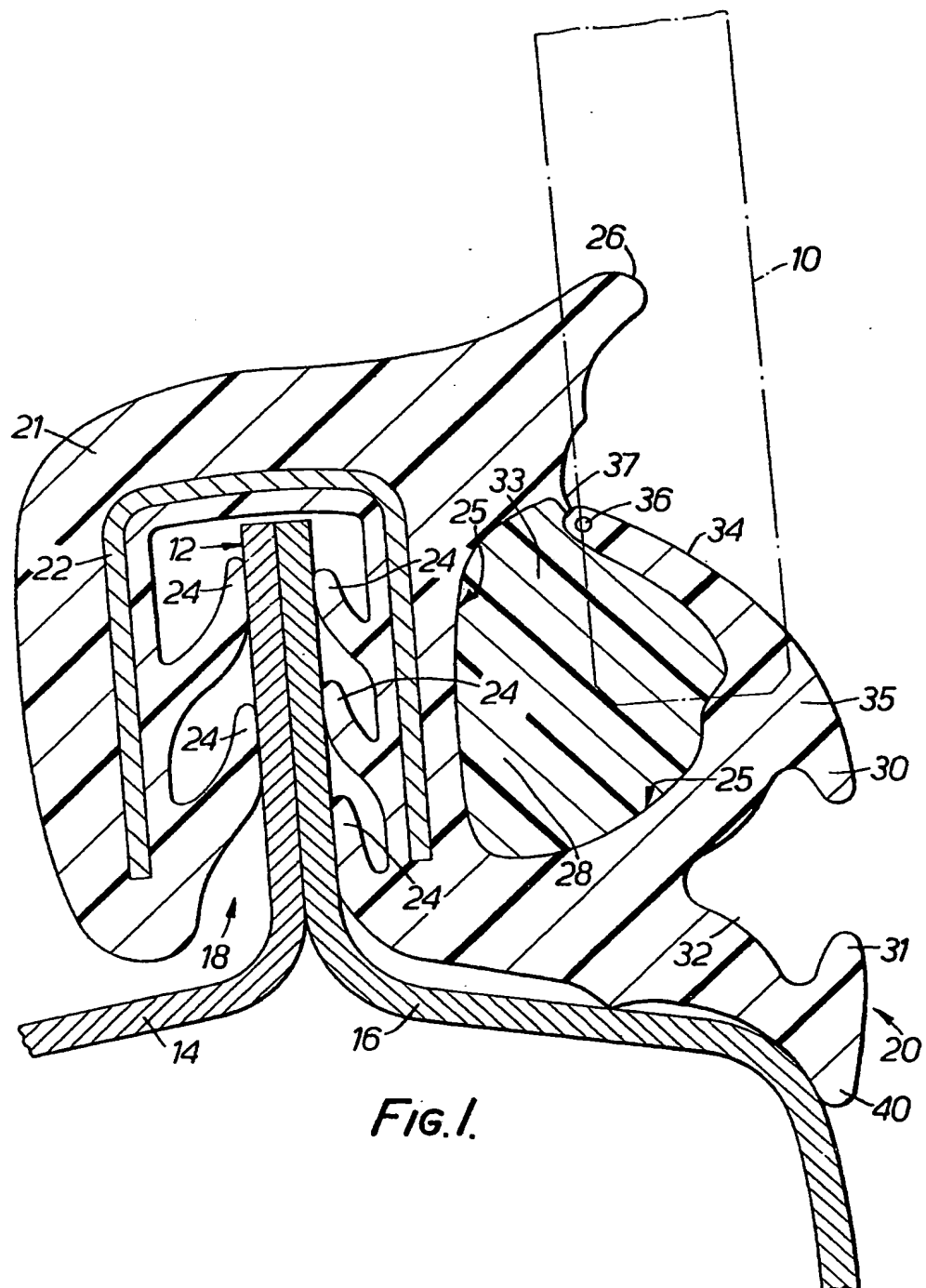
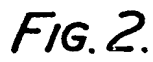


Fig. 1.



SPECIFICATION

Improvements in and relating to window glass mounting arrangements

- 5 The invention relates to window glass mounting arrangements such as, for example, for use in motor vehicles.
- Various novel features of the invention will be apparent from the following description, given by way of example only, of a window glass mounting arrangement embodying the invention, reference being made to the accompanying drawing in which:
- 10 Figure 1 is a cross-section through the mounting arrangement before the window glass is in position; and
- Figure 2 corresponds to Fig.1 but shows the glass in position.
- 20 More specifically to be described is a window glass mounting arrangement formed with means by which it supports itself on the frame of the window opening and defines a surface of flexible material running at least partly around the window opening for sealing the window glass, the said surface defining means for receiving a mastic substance for securing the window glass in position.
- Advantageously, the arrangement includes
- 30 a flap of flexible material which, when the window glass is not in position, covers the mastic and, when the window glass is in position, lies along an external edge surface of the window glass so as to obscure the mastic from external visibility.
- Advantageously, the means by which the mounting arrangement supports itself on the frame of the window opening comprises
- 40 means defining a channel in flexible material which is integral with the flexible material defining the said surface but spaced from that surface, the said channel being adapted to embrace and grip a mounting flange or the like running around the window opening.
- 45 Preferably, the flexible material is reinforced with an embedded carrier of channel-shape and embracing the said channel.
- Furthermore, the facing internal walls of the flexible material, where it defines the said
- 50 channel, may define one or more lips running along the length of the channel and projecting inwardly of the channel so as to grip and seal against the sides of the mounting flange.
- Advantageously, the said flexible material is
- 55 formed with a slot running along the length of the mounting arrangement adjacent to the said surface, such that the material defining the said surface also forms at least part of one of the longitudinal side walls of the said slot,
- 60 whereby the material can be flexed inwardly of the said slot so as to provide additional clearance for entry of the window glass, whereafter the flexible material may be allowed to resile, a relatively stiff longitudinally extending
- 65 stiffening member sized to fit into the said slot
- after the flexed material has resiled being used thereafter to hold the said surface into supporting relationship with an edge of the window glass.
- 70 Advantageously, the means for receiving the mastic runs along and immediately adjacent to the said surface.
- Advantageously, the said flap is anchored to the said surface along a line adjacent the external edge thereof so as to be hingeable about that line between a position in which it overlaps the mastic and a position in which it lies against the external surface of the window glass.
- 80 Advantageously, the arrangement is such that, when the window glass is in position, no part thereof projects outwardly of the external surface of the window glass to any significant extent beyond the said flap where it lies against that external surface.
- 85 In a more detailed sense, there will be described below a window glass mounting arrangement having mounting means by which it supports itself on a surround running around the window opening so as to provide flexible material defining a ledge-shaped surface running at least partly around the window opening for receiving the peripheral edge of the window glass, the said ledge-shaped surface defining a recess for receiving a mastic for adhesively securing the window glass in position on the ledge surface, and a longitudinally extending flap of flexible material which, when the window glass is not in position, extends over the recess so as to cover the mastic therein and, when the window glass is in position, lies along the external peripheral surface of the window glass so as to visually obscure the mastic, no part of the mounting arrangement projecting outwardly of the external surface of the window glass to any significant extent beyond the flap.
- Advantageously, the mounting means comprises flexible material integral with the flexible material defining the ledge-shaped surface and defining a longitudinal channel spaced from the ledge-shaped surface and sized so as to embracingly grip a mounting flange running around the window opening.
- Advantageously, a reinforcing metal carrier is embedded in the flexible material where it defines the said channel. The flexible material defining the channel may be provided with
- 120 integral gripping lips extending inwardly of the channel so as to make gripping and sealing contact with the sides of the said flange.
- Advantageously, the base of the ledge-shaped surface forms at least part of one wall of a longitudinally extending slot defined in the flexible material, whereby the said base may be flexed inwardly of the said slot to provide additional clearance for entry of the window glass, the said base thereafter resiling
- 130

and being held in the resiled position by means of a stiffening member which is sized to fit into the said slot.

The foregoing are exemplary of and not exhaustive of the various novel features of the invention.

The mounting arrangement now to be described in more is for mounting a window glass 10, such as the windscreen or wind-shield glass of a motor vehicle (though not restricted thereto), in a window opening in the vehicle, the window opening being surrounded by a bodywork flanged joint 12 lying parallel to the plane of the window opening. The flanged joint 12 is formed between two bodywork portions 14 and 16.

The mounting arrangement comprises a gripping portion 18 and a mounting and sealing portion 20 which are made of integral plastics or rubber material 21.

The gripping portion 18 is channel-shaped in cross-section and has embedded in it a reinforcing carrier 22 of any suitable form. For example, the carrier may be made of metal and in the form of side-by-side U-shaped elements either connected together or entirely disconnected. Instead, it could be made of wire looped to and fro across the channel. Preferably, it is embedded in the material 21 by a cross-head extrusion process.

The material 21 is extruded so as to provide integral gripping lips 24.

The mounting and sealing portion is extruded so as to provide a generally ledge-shaped surface 25 having a lip 26 and a recess 28. In addition, it provides lips 30 and 31 defining a generally V-shaped slot 32.

Mastic 33 of any suitable form is positioned in the recess 28. A web-like flap 34 of thin flexible material is anchored to the surface 25 along an external edge thereof, at 35. Along its opposite edge, the flap 34 has beading 36 of any suitable form and is secured to the adjacent wall of the ledge-shaped surface 25 by a very thin membrane 37. Advantageously, the flap 34 is formed of the same material as the material 21 and is extruded integrally therewith, though this is not essential.

The mounting arrangement shown is manufactured in strips of indeterminate length which are then cut to the peripheral length of the window opening. The mastic 33 is placed in position by the manufacturer of the mounting arrangement so as to be covered by the flap 34. The mounting arrangement with the mastic in it is delivered in this form to the motor manufacturer. In this way, the motor manufacturer does not have to place the mastic in position himself and, furthermore, the flap 34 securely covers, retains and protects the mastic.

The motor manufacturer fixes the mounting arrangement in position by placing the gripping portion 18 over the flanged joint 12 and pressing it thereon so that it firmly grips itself

in position, helped by the gripping and sealing lips 24.

The window glass 10 is then placed into position on the ledge-shaped surface 25. To facilitate this process, the lip 30 is, during the assembly of the window glass, bent downwardly and inwardly of the slot 32 so as to provide additional clearance for the entry of the window glass, and is thereafter allowed to resile into its generally horizontal position. During this process, the window glass presses then ap 34 downwardly and ruptures the membrane 37. By means of a suitable tool, the flap 34 is then pulled outwardly under the lower edge of the window glass, the beading 36 stiffening the now-free edge of the flap and assisting this process. During this process, the flap hinges along the line 35.

The flap 34 is now clear of the mastic 33 which thus adheres to the window glass and holds it firmly in position on the ledge-shaped surface.

As shown in Fig. 2, the outwardly hinged flap 34 now lies against the external peripheral surface of the window glass 10, and not only helps to retain the window glass in position but prevents the mastic from being externally visible through the glass.

Finally, a stiffening member 38, made of relatively hard plastics or rubber material for example, is forced into the slot 32, around the whole length of the mounting arrangement, so as to become locked into position by the re-entrant lips 30 and 31. The stiffening member 38 thus holds the lip 30 firmly in the attitude shown, thus helping to hold the window glass 10 firmly in position. The stiffening member 38 advantageously carries a bright trim strip 41.

The lip 40 enables the arrangement to adjust itself in a variety of differently shaped body portions 16.

The mounting arrangement is advantageous because it provides an outer surface which is substantially flush with the outer surface of the window glass 10. As will be apparent from Fig. 2, no part of the mounting arrangement projects outwardly of the external surface of the window glass to any significant extent beyond the flap 34.

If desired, the mounting arrangement may be pre-formed into a closed loop sized to fit a particular size of window opening.

The arrangement shown is advantageous because the window glass 10 is very firmly secured in position on the mounting arrangement by means of the mastic 33, but the mastic does not directly secure the window glass to the vehicle body. The latter is achieved by the gripping portion 18, and this enables greater tolerances in the dimension of the vehicle body to be permitted and provides a reduced fixing time.

The arrangement is also advantageous because the vehicle manufacturer himself does